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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/533,944	03/23/2000	Atsushi Inoue	040301/0595	9999

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EXAMINER

BARQADLE, YASIN M

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 09/25/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/533,944

Applicant(s)

INOUE ET AL.

Examiner

Yasin M Barqadle

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 07-09-2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2153

Response to Amendment

1. The amendment filed on July 9, 2003 has been fully considered but are moot in view of the new ground(s) of rejection.

2. Claims 1-26 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 2153

Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Lumelsky US (6246672).

1. As per claims 1 and 11, Lumelsky teaches an information delivery system for delivering WWW information (data repository 401, fig. 1) provided by information servers on Internet to mobile computers (fig. 1, 301) connected to the Internet through a wireless network (fig. 1, 403, comprising:

a plurality of cache servers (plurality of PRSS fig. 1, 201 servers containing system cache 212, fig.3) provided in association with the wireless network and configured to be capable of caching WWW information provided by the information servers [col. 8, lines 16-55].

a management unit (fig. 3, 212 and 212A) configured to manage caching state of the cache servers, by receiving a message indicating at least a connected location of a mobile computer in the wireless network from the mobile computer (mobile user's request is received and the PRSS determines a user's network address which is part of the request data package), selecting one or more cache servers located nearby the mobile computer according to the message, and controlling said one or more cache servers to cache selected WWW information selected for the mobile computer, so as to enable faster accesses to the selected WWW information by the mobile computer [Col. 11, lines 8-65 and col. 19, line 33 to col. 20, line 52].

Art Unit: 2153

As per claim 2, Lumelsky teaches where the selected www information is selected according to information related to a user of a mobile computer [col. 8, lines 16-55].

2. As per claim 3, Lumelsky teaches a system wherein the selected WWW information is selected according to information related to an information provider of the selected WWW information [col. 8, lines 16-55].

3. As per claim 4, Lumelsky teaches a system wherein the mobile computer sends the message containing identification information for specifying one or more WWW information, at least at a time of network connection [col. 11, lines 48-65 and col. 22, lines 1-24]; and

the management unit controls said one or more cache servers to cache WWW information selected according to the identification information contained in the message as the selected WWW information [col. 11, lines 48-65 and col. 22, lines 1-24].

4. As per claim 5, Lumelsky teaches a system the system wherein the mobile computer sends the message containing a user ID of a user of the mobile computer [Col.11, lines 5-36]; and

the management unit registers in advance user IDs of users of the mobile computers in correspondence to respective identification information for specifying one or more WWW information, and controls said one or more cache servers to cache

Art Unit: 2153

said one or more information specified by the identification information registered in correspondence to the user ID contained in the message as the selected WWW information [Col. 11, line 48 to col. 12, line 10 and col. 22, lines 1-24].

5. As per Claim 6, Lumelsky teaches a system wherein the mobile computer sends the message containing a user ID of a user of the mobile computer [Col. 11, line 48 to col. 12, line 10]; and

the management unit registers in advance a correspondence between a user ID of each user of each mobile computer and one or more information provider IDs of those information providers who wish to provide services to said each user and a correspondence between each information provider ID of each information provider and one or more WWW information IDs of those WWW information which are to be provided by said each information provider, searches the information provider IDs registered in correspondence to the user ID contained in the message, searches the WWW information IDs registered in correspondence to each information provider ID found by a search, and controls said one or more cache servers to cache WWW information having the WWW information IDs found by a search as the selected WWW information [Col. 11, line 48 to col. 12, line 10 and col. 22, lines 1-24].

6. As per claim 7, Lumelsky teaches a system wherein either the mobile computer or the management unit predicts another one or more cache servers to be selected when a need to change cache

Art Unit: 2153

servers nearby the mobile computer due to moving of the mobile computer is predicted to arise, and the management unit controls said another one or more cache servers to cache the selected WWW information according to a result of prediction [Col. 8, lines 38-60 and col. 20, lines 25-63].

7. As per claim 8, Lumelsky teaches a system wherein the management unit maintains an update frequency information indicating an update frequency of WWW information provided by each information provider, and controls said one or more cache servers to carry out a cache update processing with respect to the selected WWW information according to the update frequency information [col. 19, line 41 to col. 20, line 50].

8. As per claim 9, Lumelsky teaches a system wherein the management unit changes the selected WWW information cached in said one or more cache servers according to at least one of a likelihood by which each WWW information is expected to be accessed and a priority level determined for each WWW information, when a cache state of any one of said one or more cache servers reaches to a prescribed criterion [Col. 11, lines 8-60 and col. 20, lines 25-63].

9. As per claim 10, Lumelsky teaches a system wherein the wireless network comprises a first network for providing data transmission at relatively low transfer rate, and a second

Art Unit: 2153

network for providing data transmission at relatively high transfer rate at least in a downlink direction, and the management unit receives the message from the mobile computer via the first network, and the cache servers transfer the selected WWW information to the mobile computer via the second network [fig. 1 and Col. 8, lines 1-60 and Col. 11, lines 8-60].

10. As per claim 12, Lumelsky teaches a system wherein information providers are classified into a plurality of classes, and said one or more cache servers and the selected WWW information are specified by the information provider in accordance with a predetermined range of numbers permitted for a class to which the information provider belongs [abstract and Col. 8, lines 1-60].

11. As per claim 13, Lumelsky teaches a system wherein the management unit maintains an update frequency information indicating an update frequency of WWW information provided by each information provider, and controls said one or more cache servers to carry out a cache update processing with respect to the selected WWW information according to the update frequency information [Col. 11, line 48 to col. 12, line 10 and col. 22, lines 1-24].

12. As per claim 14, Lumelsky teaches a system wherein the management unit changes the selected WWW information cached in

Art Unit: 2153

said one or more cache servers according to at least one of a likelihood by which each WWW information is expected to be accessed and a priority level determined for each WWW information, when a cache state of any one of said one or more cache servers reaches to a prescribed criterion [Col. 8, lines 38-60 and col. 20, lines 25-63].

13. As per claim 15, Lumelsky teaches a system wherein the wireless network comprises a first network for providing data transmission at relatively low transfer rate, and a second network for providing data transmission at relatively high transfer rate at least in a downlink direction, and the management unit receives a message from the mobile computer via the first network, and the cache servers transfer the selected WWW information to the mobile computer via the second network [fig. 1 and Col. 8, lines 1-60 and Col. 11, lines 8-60].

14. Regarding claims 16 and 17, these are method claims with similar limitations as claims 1 and 11 above. Therefore, they are rejected with the same rationale.

15. As per claims 18 and 19, Lumelsky teaches a management device (fig. 3, 212 and 212A) for use in an information delivery system for delivering WWW information provided by information servers on Internet to mobile computers connected to the Internet through a wireless network (fig. 1, 403), using a plurality of

Art Unit: 2153

cache servers (fig. 1, PRSS 201) provided in association with the wireless network and configured to be capable of caching WWW information provided by the information servers, the management device comprising:

a first unit configured to receive a message indicating at least a connected location of a mobile computer in the wireless network from the mobile computer [mobile user's request is received and the PRSS determines a user's network address which is part of the request data package Col. 11, lines 8-65; col. 20 lines 25-52];

a second unit configured to select one or more cache servers located nearby the mobile computer according to the message [Col. 11, lines 8-65; col. 20 lines 25-52]; and

a third unit configured to control said one or more cache servers to cache selected WWW information selected for the mobile computer, so as to enable faster accesses to the selected WWW information by the mobile computer [Col. 11, lines 8-65; col. 20 lines 25-52].

16. As per claim 20, Lumelsky teaches a mobile computer device for use in an information delivery system for delivering WWW information provided by information servers on Internet to mobile computers connected to the Internet through a wireless network (fig. 1, 403), using a plurality of cache servers (fig. 1, PRSS 201) provided in association with the wireless network and configured to be capable of caching WWW information provided by

Art Unit: 2153

the information servers, the mobile computer device comprising:

a first unit configured to maintain a user ID of a user of the mobile computer device [Col. 11, line 48 to col. 12, line 10];

a second unit configured to obtain a connected location information regarding a connection location of the mobile computer device in the wireless network [Col. 11, line 48 to col. 12, line 10]; and

a third unit configured to notify a message containing at least the user ID and the connection location information, to a management device for managing caching state of the cache servers, such that the message causes the management device to select one or more cache servers located nearby the mobile computer device according to the message and control said one or more cache servers to cache selected WWW information selected for the mobile computer device, so as to enable faster accesses to the selected WWW information by the mobile computer device [fig. 1, and Col. 11, line 38 to col. 12, line 25].

17. As per claim 21, Lumelsky teaches a mobile computer device wherein the third unit notifies the message which also contains a bookmark information of a WWW browser operating on the mobile computer device, such that the selected WWW information is selected according to the bookmark information contained in the message [col. 10, line 63 to col. 11, line 47].

Art Unit: 2153

18. As per claims 22 and 23, Lumelsky teaches a cache server device for use in an information delivery system for delivering WWW information provided by information servers on Internet to mobile computers connected to the Internet through a wireless network, using a plurality of cache servers provided in association with the wireless network, the cache server device comprising:

a cache memory (fig. 3, 212) configured to cache WWW information provided by the information servers [Col. 8, lines 16-55]; and
a caching processing unit configured to acquire selected WWW information selected for a mobile computer from the information servers and store the selected WWW information into the cache memory, when the cache server device is included in one or more cache servers located nearby the mobile computer according to a message indicating at least a connection location of the mobile computer in the wireless network which is sent by the mobile computer, so as to enable faster accesses to the selected WWW information by the mobile computer [Col. 11, lines 8-65 and col. 19, line 33 to col. 20, line 52].

19. As per claims 24, and 25, Lumelsky teaches a method for providing a caching service with respect to a specific user in a system for delivering WWW information provided by information servers on Internet to mobile computers connected to the Internet through a wireless network, the method comprising the steps of:

Art Unit: 2153

registering the specific user as a premier user in an information delivery system having a plurality of cache servers provided in association with the wireless network and configured to be capable of caching WWW information provided by the information servers [Col. 11, lines 5-36]; and
upon receiving a message indicating at least a connected location of a mobile computer in the wireless network from the mobile computer operated by the specific user (mobile user's request is received and the PRSS determines a user's network address which is part of the request data package Col. 11, lines 8-65),
selecting one or more cache servers located nearby the mobile computer according to the message and controlling said one or more cache servers to cache selected WWW information selected for the specific user, so as to enable faster accesses to the selected WWW information by the mobile computer [Col. 11, lines 8-65 and col. 19 , line 33 to col. 20, line 52].

As per claim 26, Lumelsky teaches the method of claim 25, further comprising the steps of:

registering another information provider as a non-premier sponsor in the information delivery system [col. 8, lines 38-60 and Col. 11, lines 7-65];

selecting one or more cache servers located within a geographic range defined for said another information provider, and controlling said one or more cache servers to cache selected www information selected for said another information provider,

Art Unit: 2153

wherein an number of said cache servers that are updated with information of said premier sponsor is greater than a number of said cache servers that are updated with information of said non-premier sponsor [Col. 19, line 15 to col. 20, line 49 and col. 23, lines 13-29].

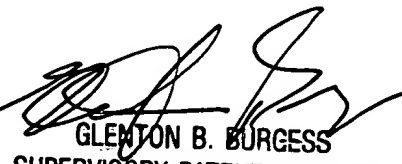
Conclusion

The prior made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yasin Barqadle whose telephone number is 703-305-5971. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 703-305-9717. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-304-3900.


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